

now infer that the user is direct-dialing a number, since all the entered key-strokes have numeric values and the lookup string yields no results. Accordingly, dial string 611 is now highlighted to indicate that it is the only valid operation. However, if the user were to now press backspace key 203 at this point, deleting the "0", the lookup string would revert to "BI" and screen 701 would again be displayed.

**[0182]** At this point, the user simply enters the remaining digits in the number being dialed. Referring now to Fig. 7D, there is shown display screen 730 after the user has completed entry of a ten-digit telephone number. Hyphens in dial string 611 may be added automatically, according to standard telephone number syntax. Once the user has finished entering the number, he or she presses space bar 207 or enter key 204 to dial the number. Alternatively, the user may tap the number on the screen (with a stylus or finger), or may press a jog rocker control (not shown).

**[0183]** In one embodiment, once the invention has reached a state where no records match the lookup string (e.g. screen 720), non-numeric keystrokes are rejected. Thus, if the user presses a key that does not have a numeric value, the invention may ignore the keystroke, or may provide feedback (such as a beep, for example) indicating that the entry is invalid.

**[0184]** As can be seen from the above description and examples, the present invention allows the user to perform a directory filtering operation or to di-

rect-dial a number, on a keyboard having multiple-value keys, without first specifying which operation is intended. The invention further provides functionality for filtering on multiple fields in a directory, including derived fields and/or combination fields. As will be understood by those familiar with the art, the invention may be embodied in other specific forms without departing from the spirit or essential characteristics thereof. For example, the particular architectures depicted above are merely exemplary of one implementation of the present invention. The functional elements, method steps, screen shots, and user interface elements described above are provided as illustrative examples of one technique for implementing the invention; one skilled in the art will recognize that many other implementations are possible without departing from the present invention as recited in the claims. Likewise, the particular capitalization or naming of the modules, protocols, features, attributes, or any other aspect is not mandatory or significant, and the mechanisms that implement the invention or its features may have different names or formats. Accordingly, the disclosure of the present invention is intended to be illustrative, but not limiting, of the scope of the invention, which is set forth in the following claims.